
A New Species of *Xylopia* (Annonaceae) from Southern Venezuela

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ABSTRACT. *Xylopia plowmanii* is newly described from plants from Estado Apure and Estado Amazonas, Venezuela. It most closely resembles a group of emarginate-leaved species that includes *X. emarginata*, *X. spruceana*, and *X. venezuelana*.

During the preparation of the Annonaceae treatment for the upcoming *Flora of the Venezuelan Guayana*, the following new species of *Xylopia* was recognized and is described below.

Xylopia plowmanii P. E. Berry & D. Johnson, sp. nov. TYPE: Venezuela. Amazonas: Tobogán de la Selva, along Río Coromoto, 35 km S of Puerto Ayacucho, approximately 5°22'N, 67°33'W, T. Plowman & F. Guánchez 13523 (holotype, MO; isotypes, F, NY, U). Figure 1.

Species *Xylopie emarginatae* Martius, *X. spruceanae* Bentham et *X. venezuelanae* R. E. Fries proxima, differt vero: caulibus juvenilibus sparse adpresseque puberulentibus deinde subglabris, foliis latioribus atque elliptico-oblongis, pagina inferiore glabris, excepta costa adpresse strigosa, calyce glabro leviter lobato, 2 mm longo, 3.5–4.5 mm lato, petalis exterioribus 14.5–18 mm longis, dorso inconspicue adpresso-pubescentibus, petalis interioribus 14–20(–24) mm longis.

Tree 12–16(–20) m tall. Leaf-bearing twigs 0.8–2.8 mm thick, brown to grayish brown, at first finely appressed-puberulent, later becoming glabrate, lenticellate. Blades of mature leaves 5–8 cm long, 2–3 cm wide, subcoriaceous, discolored, oblong to elliptic-oblong, rounded and conspicuously emarginate at the apex, narrowed toward the base but angled sharply 2–4 mm from the petiole, making the base obliquely truncate, glabrous except for midrib, which is strigose abaxially with hairs 1–2 mm long; midrib impressed adaxially, raised abaxially; secondary veins faint, 7–9 per side, at 60–70° angle to midrib, slightly raised on both surfaces of the blade, anastomosing ca. 3 mm from the margin; petioles 3–4 mm long, 1.1–1.3 mm wide, terete, shallowly canaliculate and pubescent adaxially, glabrous abaxi-

ally. Flowers axillary, commonly two (sometimes three) per axil; inflorescence axis below articulation with pedicel 1–2.2 mm long, 1.1–1.3 mm thick; pedicel 2.8–4 mm long, 0.7–0.8 mm thick at midpoint, with an amplexicaul bract attached 1.2–1.5 mm above the articulation; bract 0.9–1 mm long, 1–1.3 mm wide, quadrate to semicircular. Calyx cuplike, 3.5–4.5 mm diam., divided to about the midpoint into broadly triangular lobes 1.5–2 mm long, glabrous. Petals pale yellow adaxially, orange except for the yellowish base abaxially; outer petals 14.5–18 mm long at maturity, 2 mm wide at midpoint, strap-shaped, widening to 3 mm at base, base concave, apex obtuse, densely puberulent adaxially, very sparsely appressed-puberulent abaxially; inner petals subequal in length to outer ones and similar in shape or exceptionally to 24 mm long, 1.2 mm wide at midpoint, 2 mm wide at base, puberulent along the midvein adaxially, uniformly puberulent abaxially. Stamens numerous, 1–1.4 mm long, 0.2–0.4 mm wide, the outermost ones converted into staminodes 0.9–1.2 mm long, 0.4–0.5 mm wide; connectives dome-shaped, short conic or truncate, papillate; filaments 0.4 mm long. Carpels 6–10, linear; ovaries 0.9–1 mm long, pubescent; style/stigma 4.2–4.8 mm long, linear, with a few sparse hairs along edges; ovules 4 in a single row. Torus in flower 2.1 mm diam., the stamens leaving raised scars on the torus surface, the center of the torus excavated, with the ovaries concealed within the cavity with only the styles exerted. Pedicel in fruit 10 mm long, 2 mm wide, glabrate. Monocarps 4–6, stipitate, the seed-containing portion 1.9–2.8 cm long, 1–1.8 cm wide, irregularly ovoid, densely covered by a matted, ferruginous indument, turning brown and glabrescent at maturity; stipes 4–7 mm long, 1.5–2 mm wide. Seeds usually 3 per monocarp, at 60° angle to long axis of monocarp, 6.5–7.5 mm long, 4–5 mm wide, ellipsoid, smooth; aril bilobed.

Distribution. Southern Estado Apure and northwestern Estado (formerly Territorio Federal) Ama-

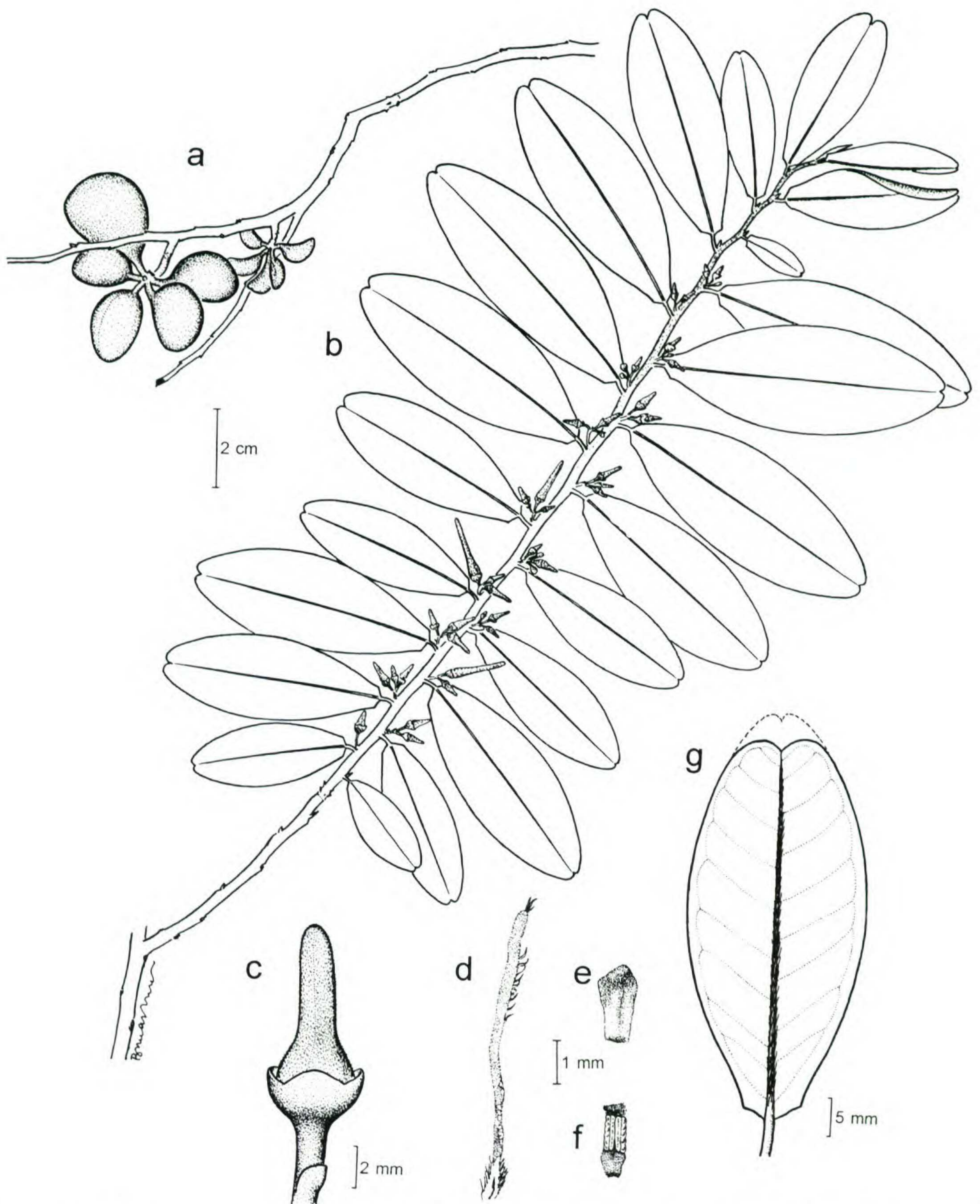


Figure 1. *Xylopia plowmanii* (from Davidse & González 15875, except for floral details from Plowman & Guánchez 13523). —a. Fruiting branch. —b. Flowering branch. —c. Floral bud showing cuplike calyx. —d. Single carpel, in lateral view, showing the elongated style. —e. Staminode, abaxial view. —f. Stamen, abaxial view. —g. Lower (abaxial) surface of a leaf showing the strigose indument along the midrib and the angular base of the blade.

zonas, Venezuela, 75–550 m elevation, in gallery forests and on forested slopes along granite outcrops.

This species resembles the species group of *Xylopia emarginata* Martius, *X. spruceana* Benthams, and *X. venezuelana* R. E. Fries, which are char-

acterized by relatively small flowers and somewhat leathery, emarginate leaves. It differs from them mainly in the broader, chartaceous (vs. coriaceous) leaves and the relatively glabrous outer petals. Although occasionally found in other members of the

“emarginata” group, the leaves consistently have a prominent, angular projection toward the base and a strigose abaxial surface of the midrib. This species is dedicated to the late Timothy Plowman, who was an extremely knowledgeable and enthusiastic neotropical botanist.

Paratypes. VENEZUELA. **Amazonas:** Serranía Batata, 2 km al NE del Salto Colorado, 55 km SE de Puerto

Ayacucho, 5°33'N, 67°08'W, 550 m, *Sanoja et al.* 3327 (MO, PORT). **Apure:** Distrito Pedro Camejo, Caño (or Morichal) El Caballo, 16 airline km NW of Mata de Guanábana, between the Río Meta and the Río Cinaruco, 6°19'N, 68°19'W, elev. 75 m, 27 Feb. 1979 (fr), G. Davidse & A. González 15875 (MO, U, VEN).